Amendments to the Specification

Please amend the Title as follows.

Methods of Treating Dielectric Materials With Oxygen, and Methods of Forming Capacitor Constructions

At page 1, prior to the Technical Field section, please enter the following new paragraph.

RELATED PATENT DATA

This patent resulted from a continuation application of U.S. Patent Application Serial No. 10/222,330, filed August 15, 2002, which resulted from a continuation application of U.S. Patent Application Serial No. 09/945,308 which was filed on August 30, 2001.

Please replace Paragraph 15 beginning on page 5 with the following replacement paragraph.

[0015] Chamber 12 further comprises an inlet port 16 and an outlet port 18. A fluid 20 is flowed from a source 22 21 into chamber 12 through inlet port 16, and exits chamber 12 through outlet port 18. Fluid 20 comprises an oxygen-containing component. In particular

embodiments, fluid 20 can comprise a gas, which includes, consists of, or consists essentially of ozone (O_3). The amount of ozone within fluid 20 can vary from about 0.1% concentration (by volume) to about 100% concentration. The ozone can be diluted in a second gas, such as, for example, O_2 .

Please replace Paragraph 21 beginning on page 7 with the following amended paragraph.

It can be desired to carefully control a concentration of laser-light absorbing materials within reaction chamber 12. For instance, if a laser-light absorbing material is O₃ it can be desired to control an amount of O₃ within reaction chamber 12. Specifically, if an amount of O₃ within the chamber is too high, the laser energy will be absorbed by the O₃ before the laser beam 30 has penetrated a sufficient distance within chamber 12 to reach a desired location proximate dielectric material 26. On the other hand, if the concentration of O₃ is too low, there will not be a sufficiently high flux of reactive oxygen species delivered proximate dielectric material 26 to react with the various oxygen-deficient regions within the dielectric material 26. In an exemplary method of the present invention, fluid 20 comprises a gaseous mixture of O₃ and O₂, with the O₃ being present to a concentration of about 1%-10% (by volume), and the mixture being flowed through chamber 12 at a rate of about 1000 standard cubic centimeters per minute (sccm). A distance from an upper surface of dielectric material 26 to window 14 is about 25 millimeters, and the laser beam 30 is focused at a location

that is from about 2 millimeters to about 4 millimeters above an upper surface of dielectric material 26. Wafer 24 is heated to a temperature of about 300°C during such exemplary processing.

Please replace Paragraph 35 beginning on page 11, with the following amended paragraph.

[0035] An advantage of methodology of the present invention is that such generates a high flux of activated species proximate a surface of a dielectric material which is to be treated with such activated species. Another advantage is that the laser beam is utilized to generate activated species, rather than being utilized to directly impact the dielectric material. In other words, the laser light is utilized to generate a migratory reactive species, rather than being directly utilized in any reaction occurring within dielectric material 70. Accordingly, the laser light can be focused at varying locations relative to dielectric material 70, and yet the migratory reactive species will traverse to the dielectric material and react therewith. In contrast, if the laser light were utilized directly in a reaction with the dielectric material, a focal point of the laser light would typically be directed at a surface of the dielectric material. Such can be problematic in applications, such as that shown, in which the dielectric material has an undulating upper surface, as it can be difficult to keep the laser beam focused on such undulating surface as the laser beam is passed across the surface. Another problem can occur in the difficulty of hitting vertical walls or surfaces with the laser energy. However, methodology of the present invention is simplified relative to

processes in which a laser beam is focused at a surface of the dielectric material in that the present invention can utilize a laser beam which is focused within a range of locations above a surface of the dielectric material. It is to be understood, however, that the invention can also encompass embodiments wherein the laser beam is focused at the surface of the dielectric material and generates the reactor reactive species against such surface, but such embodiments are generally less preferred than embodiments in which the laser beam is focused at a location above the surface of the dielectric material.

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